

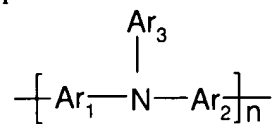
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A composition comprising: (i) at least one higher molecular weight organic semiconducting compound having a number average molecular weight (M) of at least 5000, and (ii) at least one lower molecular weight organic semiconducting compound having a number average molecular weight (M) of ~~10000~~1000 or less, whereby the composition functions as a organic semiconducting material, and wherein both the higher and lower molecular weight semiconducting compounds ~~have~~are present in the composition in the relative proportions 30:70 – 70:30 parts by weight, and at least the higher molecular weight semiconducting compound has a charge carrier mobility, μ , of at least $10^{-5-4}\text{cm}^2/\text{V.s.}$
2. (Original) A composition as claimed in claim 1 wherein the M of the higher molecular weight semiconducting compound is at least 7000.
3. (Original) A composition as claimed in claim 2 wherein the M of the lower molecular weight semiconducting compound is at least 150.
4. (Currently Amended) A composition as claimed in claim 1 wherein ~~at least one of both~~ the higher and lower molecular weight semiconducting compounds ~~has~~have a charge carrier mobility, μ , of at least $10^{-45}\text{cm}^2/\text{V.s.}$
5. (Cancelled)
6. (Currently Amended) A composition as claimed in claim 1 wherein said charge carrier mobility, μ , is at least $10^{-4}\text{cm}^2/\text{V.s.}$
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Original) A composition as claimed in claim 9 wherein the higher and lower molecular

weight semiconducting compounds are present in the composition in the relative proportions 40:60 - 60:40 parts by weight.

12. (Previously Presented) A composition as claimed in claim 1 wherein the lower molecular weight semiconducting compound comprises either an oligomer having a number of repeat units, n, in the range 2 – 5, or a non-oligomeric molecule where n=1.
13. (Original) A composition as claimed in claim 11 wherein the lower molecular weight semiconducting compound contains one or more of arylamine, fluorene, and/or thiophene groups.
14. (Original) A composition as claimed in claim 12 wherein the lower molecular weight semiconducting compound has a Formula 1:



Formula 1

wherein Ar¹, Ar² and Ar³, which may be the same or different, each represent, independently if in different repeat units, an aromatic group (mononuclear or polynuclear) optionally substituted by at least one optionally substituted C₁₋₄₀ hydrocarbyl group and/or at least one other optional substituent and n = 1 to 4.

15. (Previously Presented) A composition as claimed in claim 1 wherein the higher molecular weight semiconducting compound comprises a conjugated polymer.
16. (Original) A composition as claimed in claim 14 wherein the higher molecular weight semiconducting compound comprises a polymer being either a homo-polymer or copolymer, including a block-copolymer, containing one or more of arylamine, fluorene, thiophene and/or optionally substituted aryl groups.
17. (Original) A composition as claimed in claim 15 wherein the polymer is a homo-polymer or copolymer, including a block-copolymer, containing arylamine and/or fluorene units.

18. (Original) A composition as claimed in claim 15 wherein the polymer is a homopolymer or copolymer, including block-copolymer, containing fluorene and/or thiophene units.
19. (Original) A composition as claimed in claim 15 wherein the polymer is an arylamine group containing polymer having a Formula 11 wherein Formula 11 is the same as Formula 1 except that n is at least 5.
20. (Original) A composition as claimed in claim 18 wherein n is at least 20.
21. (Previously Presented) A composition as claimed in claim 1 wherein the higher and lower molecular weight semiconducting compounds each contain one or more of the following groups in common: arylamine, fluorene and/or thiophene.
22. (Original) A composition as claimed in claim 20 comprising at least one compound of Formula 1 where n = 1 or 2 as the lower molecular weight compound and at least one compound of Formula 11 where n is at least 20 as the higher molecular weight compound.
23. (Previously Presented) A composition as claimed in claim 1 further comprising a binder resin.
24. (Previously Presented) In an electronic device containing an organic semiconducting material, the improvement wherein the organic semiconducting material is a composition according to claim 1.
25. (Previously Presented) An electronic device, containing a layer comprising a composition according to claim 1.
26. (Previously Presented) A device as claimed in claim 24 wherein the layer is deposited on a part of the electronic device by solution coating.

27. (Previously Presented) A device as claimed in claim 24 wherein the layer is deposited on a part of the electronic device by one of the following coating or printing techniques : dip coating, roller coating, reverse roll coating, bar coating, spin coating, gravure coating, lithographic coating (including photolithographic processes), ink jet coating (including continuous and drop-on-demand, and fired by piezo or thermal processes), screen coating, spray coating and/or web coating.
28. (Previously Presented) A device as claimed in claim 24 wherein the layer is deposited by first depositing one of the higher and lower molecular weight compounds followed by depositing the other of the higher and lower molecular weight compounds and allowing the higher and lower molecular weight compounds to diffuse into each other to form the composition.
29. (Previously Presented) A device as claimed in claim 24 wherein the layer is used as a semiconducting layer in one of the following electronic devices: field effect transistor (FET), organic light emitting diode (OLED), photodetector, chemical detector, photovoltaic cell, capacitor or memory.
30. (Previously Presented) A device as claimed in claim 24 wherein the layer is used as a semiconducting layer in a field effect transistor (FET).
31. (Previously Presented) In an electrophotographic apparatus containing an organic semiconducting material, the improvement wherein the organic semiconducting material is a composition according to claim 1.
32. (Previously Presented) In an electronic device containing an organic semiconducting materials, the improvement wherein the organic semiconducting material is a composition according to claim 1.
33. (New) A composition according to claim 1, wherein the higher and lower molecular weight organic semiconducting compounds are of a similar chemical class.
34. (New) A composition according to claim 1, wherein the higher molecular weight organic semiconducting compound contains one or more chemical groups the same as or similar to groups contained in the lower molecular weight organic semiconducting compound.
35. (New) A composition according to claim 1, wherein the higher and lower molecular

weight semiconducting compounds each contain one or more of the following groups in common: arylamine, fluorine and/or thiophene groups.